WHAT IS CLAIMED:

1    1. A method for use in a node of a packet network, the method comprising the

2    steps of:

3        storing location information of other nodes of the packet network; and

4        exchanging the stored location information with adjacent nodes of the packet

5    network.

1    2. The method of claim 1 wherein the stored location information further

2    comprises associated time-stamp information for indicating an age of the location

3    information of the other nodes.

1    3. A method for use in a node of a packet network, the method comprising the

2    steps of:

3        storing location information of other nodes of the packet network;

4        receiving location information from at least one adjacent node of the packet

5    network; and

6        merging the received location information with the stored location information for

7    updating the stored location information to more current values.

1    4. The method of claim 3 wherein the stored location information further

2    comprises associated time-stamp information for indicating an age of the location

3    information of the other nodes and wherein the merging step compares time-stamp

4    information for determining the more current values.

1    5. A method for use in a node of a packet network, the method comprising the

2    steps of:

3        transmitting location information of the node to nodes of the packet network that

4    are a part of a local topology of the node; and

5        transmitting a location list to nodes of the local topology that are adjacent, wherein

6    the location list comprises location information of at-least-some of the nodes of the packet

7    network.

14

*Subs cl 2*

6. The method of claim 5 wherein the location list further comprises associated
time-stamp information for indicating an age of the location information of the at-least-
some of the nodes of the packet network.

7. The method of claim 5 wherein at least one of the transmitting steps is
periodically performed.

*Subs cl 2*

8. The method of claim 5 comprising the steps of:
receiving location information from at least one adjacent node of the local
topology; and
merging the received location information with the location list for updating the
location list to more current values.

9. Apparatus for use in a node of a packet network, the apparatus comprising:
a global positioning system receiver for determining location information of the
node;
a memory for storing a location list comprising location information for other
nodes of the packet network; and
a communications interface for transmitting, at different times, the determined
location information of the node, and the stored location list, to at least one node of the
packet network.

10. Apparatus for use in a node of a packet network, the apparatus comprising:
a memory for storing a location list comprising location information for other
nodes of the packet network; and
a communications interface for transmitting the stored location list to at least one
adjacent node of the packet network.

11. The apparatus of claim 10 further comprising a processor and wherein the
communications interface receives a location list from at least one adjacent node of the
packet network and the processor merges the received location list with the stored
location list for updating the stored location list to more current values.

*add a 2*   *add β2*

15